Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number Substitute for form 1449A/PTO C mplete if Kn wn **Application Number** 08/765,108 INFORMATION DISCLOSURE TATEMENT BY APPLICANT e as many sheets as necessary) Filing Date March 27, 1997 First Named Inventor Monty Krieger Group Art Unit 1646 Ulm, John D. Examiner Name MIT 6620 CIP Attorney Docket Number 13

				U.S. PATENT DOCU	MENTS	
Examiner Initials*	Cite - No.1	US Patent Docu	ment	Name of Patentee or Applicant of Cited Document	Date of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
			Code ² known)			
		3,825,214		Higuchi	12-07-1971 - 	
		4,244,946		Rivier, et al.	01-13-1981	
		4,305,872		Johnston, et al.	12-15-1981	
		4,316,891	_	Guillemin, et al.	02-23-1982	R 2 0
		4;629,784		Stammer	12-16-1986	
1		4,789,734		Pierschbacher	12-06-1988	m 111
		4,792,525		Ruoslahti, et al.	12-20-1988	20_0,
		4,868,116		Morgan, et al.	09-19-1989	6 P
		4,906,474		Langer, et al.	03 06 1000	
		4,925,673		Steiner, et al.	05-15-1990	
		4,980,286		Morgan, et al.	12 25 1990	

Examiner Initials*	Cite No. ¹		Foreign Patent Doc	ument	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM- DD-YYYY		
_		Office.3	Number⁴	Kind Code ⁵ (if known)]			
7/		wo	90/05748		Mass. Inst. Tech.	05-31-1990		
		wo	93/01286		Mass. Inst. Tech.	01-21-1993		
W		JP	05 192179		Chugai Pharm. Co.	08-03-1993	PO Transich	
2		JP	03 290184		Chugai Pharm. Co	12-19-1991	No trausion	
		ļ		_				\vdash
								<u> —</u>
xamine ignature		4			D	ate Considered		

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SENT TO: Assistant Commission for Patent, Washington, DC 20231.

MIT 6620 CIP 701350-00019

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Please type a plus sign (+) inside this box →	+	

8577 (1987).

scavenger receptors," J. Lipid Res. 34:983-1000 (1993).

Receptor for Nucleic Acid Components," J. Am. Chem. Soc. 111:1082-1090 (1989).

PTO/SB/08A (10-96 Approved for use through 10/31/99. OMB 0651-0031 Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number Substitute for form 1449A/PTO Complete If Known Application Number 08/765,108 INFORMATION DISCLOSURE APR PATEMENT BY APPLICANT (nany sheets as necessary) Filing Date March 27, 1997 APR 1 1 2002 First Named Inventor Monty Krieger Group Art Unit 1646 Ulm, John D. **Examiner Name** Attorney Docket Number MIT 6620 CIP TRADEM 13 Sheet OTHER ART -- NON PATENT LITERATURE DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the Cite Examiners item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), Initials* No. publisher, city and/or country where published ABRAMS, et al., "Macrophages in Drosophila embryos and L2 cells exhibit scavenger receptor-mediated endocytosis," Proc. Nāti: Acad: USA 89:10975-10979 (1993): ABUMRAD, et al., "Cloning of a Rat Adipocyte Membrane Protein Implicated in Binding or Transport of Long-chain Fatty Acids That is induced during Preadlpocyte Differentiation;" J. Biol. Chem. 268:17665-17668 (1993): ACTON, et al., "Expression Cloning of SR-BI, a CD36-related Class B Scavenger Receptor," J. Biol. Chem. 269(33):21003-21009 (1994): ACTON, et al., "The Collagenous Domains of Macrophage Scavenger Receptors and Complement Component C1g Mediate Their Similar, But Not Identical, Binding-Specificities for Polyanionio Ligands," J. Biol. Chem. 268:3530-3537 (1993) AGRAWAL, et al., "Oligodeoxynucleoside phosphoramidates and phosphorothioates as inhibitors of human immunodeficiency virus," Proc. Natl. Acad. Sci. USA 85:7079-7083 (1988). ARAI, et al., "Multiple Receptors for Modified Low Density Lipoproteins in Mouse Peritoneal Macrophages: Different Uptake Mechanisms for Acetylated and Oxidized Low Density Lipoproteins," Biochem. Biophys. Res. Commun. 159:4375-1382. ARUFFO, et al., "Molecular cloning of a CD28 cDNA by a high-efficiency COS cell expression system," Immunology 84:8573-

Examiner's		9 —	D	ate Considered		
Signature	l	1		10-2-01		

ASHKENAS, et al., "Structures and high and low affinity ligand binding properties of murine type I and type II macrophage

ASKEW, et al., "Melecular Recegnition with Convergent Functional Groups, Synthetic and Structural Studies with a Model

ASCH, et al., "Isolation of the Thrombospondim Membrane Receptor," J. Clin. Invest. 79:1054-1061 (1987).

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Please type a plus sign (+) inside this box →	+	
		ı

Under the Paperwork Reduction Act of 1995, no persons are required to respond to	a collection of information unless it contains a valid Of	AB control number			_
Substitute for form 1449A/PTO	Comp	lete if Known	ECH (1	九
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets an necessary)	Application Number	08/765,108	DENTER 1	PR 1 6	
/ → \	Filing Date	March 27, 1997	8	07	1
APR 1 1 2002 (5)	First Named Inventor	Monty Krieger	0,	02	П
/ Mr. \(\bar{\pi}\)	Group Art Unit	1646	8		07
	Examiner Name	Ulm, John D.	8		
Sheet 3 13	Attorney Docket Number	MIT 6620 CIP			

Examiner's	Cite	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the	T²
Initials*	No.1	item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	•
	-	BALDINI, et al., "Clening of a Rab3 isotype predominately expressed in adipocytes," Proc. Natl. Acad. Sci. USA-89:5049-5052 (1992).	
		BASU, et al., "Independent-Pathways for Secretion of Cholesterol and Apolipoprotein E by Macrophages," Science 219:871-873 (1983).	
		BICKEL, et al., "Rabbit Aortic Smooth Muscle Cells Express Indusible Macrophage Scavenger Receptor Messenger RNA That is Absent from Endothelial Cells," J. Clin. Invest. 90:1450-1457 (1992).	
		BLUME, et al., "Triple helix by purine-rich oligonucleotides targeted to the human dihydrofolate reductase promoter," Nucl. — Acids Res. 20:1777-1784 (1992).	
		BROWN, et al., "Lipopretein-Metabolism in the Macrophage: Implications for Cholesterol Deposition in Atherosclerosis," Annu. Rev. Biochem. 52:223-261 (1983).	
-		CALVO, et al., "Identification, Primary Structure, and Distribution of GLA-1, a Novel-Member of the CD36/LIMPHII Gene Family," <i>J. Biol. Chem.</i> 268 (25):18929-18935 (1993).	
		CHARRON, et al., "A glucose transport protein expressed predominately in insulin-responsive tissues," <i>Proc. Natl. Acad. Sci. USA</i> 86:2535-2539 (1989).	
		CHEN, et al., "NPXY, a Sequence Often Found-in-Chyoplasmio Tails, is Required for Goated Pit-mediated Internalization of the Low Density Lipoprotein Receptor," <i>J. Biol. Chem.</i> 265:3116-3123 (1990).	
		CLACKSON, T., et al., "Making antibody-fragments using phage display-libraries," Nature 352:624-688 (1991).	
		COONEY, et al., "Site-Specific Oligonucleotide Binding Represses Transcription of the Human c-myc-Gene In Vitro," Science-241, 456-459 (1988).	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Please type a plus sign (+) inside this box →	+	
---	---	--

+

Indee the Deer	aawada Da	advertices. And of 4005		are manifed to receased to	a a collection of information unless it s	cotains a valid OMB or	entral number			-
		ite for form 1449		are required to respond to	o a collection of information unless it o		if Known			
61	ST		BY A	SCLOSURE APPLICANT	Application Number		08/765,108	ECH CEN	APR	REC
APR	110	ر المال (فوات		,,,,,,,	Filing Date	-	March 27, 1997	<u> </u>	<u> </u>	``
ا ما	•	Æ /			First Named Inventor		Monty Krieger		6	
17.		.et			Group Art Unit		1646		2	⋖
CAT &	TRADE	ARI			Examiner Name		Ulm, John D.	8	è	帚
Sheet	4	of		13	Attorney Docket Number		MIT 6620 CIP		N	——
micet					paterno, booker tallings		J COLO G.I.	- 8		U
				OTHER ART - N	NON PATENT LITERATURE	DOCUMENTS		_8		
Examiner's Initials*	Cite No.1	CROOKE, "Pro	item (b	de name of the author ook, magazine, journal	(in CAPITAL LETTERS), title of , serial, symposium, catalog, etc publisher, city and/or country who therapoutics: pharmacodyr	the article (when ap .), date, page(s), vo ere published	lume-issue number(s),) (1993).	_	T²
		704 (1987). DAUGHERTY,	et al., "P	olymerase chain rea	chnology in the Functional A action facilitates the cloning, D18 component of leukocyte	CDR-grafting and	d rapid expression of	a-murine		
	1 1	•	•	ng characteristics of J. 304:69-73 (1994)	scavenger receptors on live	r endothelial and	Kupffer cells for mod	lified low-o	density	
				llagen Structure Me J. Biol. Chem. 268:2	ediates the Recognition of No 2126-2133 (1993).	egativity Charged	Macromotecules by	Macropha	ge	
		DUVAL-VALEN USA 89:504-50			n of transcription by triple he	dix-forming oligor	nucleotides," Proc. N	atl. Acad.	Sci.	
		ELLINGTON, e Nature 355:850			gle-stranded-DNA-molecule	s-that-fold-into-spe	ecific ligand-blnding s	structures;		
		ENDEMANN, e	t -al., "G E	36 is-a-Receptor-fo	r-Oxidized-Low-Density-Lipo	protein ," <i>JBiol.</i>- (Chem268:11811-11	81 6 (18 93)	
		FAUST, et al., ^e Chem. 262:199			Gapa city Meyalonate Trans	oort in a Chinese	Hamster O va ry Ce ll-	Variant," .	l . Biol.	
		FRASER, et al. receptor," Natu			nt macrophage adhesion int	ibited by monock	onal-antibody to mu ri	ne-scaver	ger	
xaminer's Signature		1/	-			ate Considered				

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

					Patent and Trademark Office: U.S. DEPAR	TMENT OF CO	MMERCE
		eduction Act of 1995, r Ite for form 1449/		to a collection of information unless it contains a vi	omplete if Known		
		ATENENT	N DISCLOSURE BY APPLICANT	Application Number	08/765,108	ECH CEN	APR
- 1	/		neets as necessary)	Filing Date	March 27, 1997	- 	-
Ĺ	_ API	R 1 1 20022 🗒	1	First Named Inventor	Monty Krieger	====	6
	Ž.	. Ş	İ	Group Art Unit	1646	6	-2
	18	167		Examiner Name	Ulm, John D.	<u></u>	200
Sheet	<u> ₹</u>	PADEMA	13	Attorney Docket Number	MIT 6620 CIP	129	
nicet		01		Paterney Dounce Hamber		-8	
			OTHER ART -	NON PATENT LITERATURE DOCUM	MENTS		
Examiner's Initials*	Cite No.1		Include name of the authoritem (book, magazine, journal	r (in CAPITAL LETTERS), title of the article al, serial, symposium, catalog, etc.), date, p publisher, city and/or country where publis	(when appropriate), title of the age(s), volume-issue number(s), hed		T²
	ļ <u>ļ</u>		d-nonreciprocal cross com	d type II bovine scavenger receptors in petition by acetylated and oxidized longer than the control of the con			
2			al., "Chinese Hamşter Ova Biol. Chem. 270(4):1921-1	ary Cells Expressing a Novel Type of a 927 (1995).	Acetylated Low Density Lipoprote	in	
-		GOLDSTEIN, el lipoprotein, prod	t al., "Binding-site on macrucing massive cholesterol	ophages-that-mediates-uptake and de deposition," <i>Proc. Natl. Acad. Sci. US</i>	gradation of acetylated low donsi A 76:333-337 (1979).	ty	
		GOLDSTEIN, e 98:241-260 (199		Endocytesis of Low Density Lipopretei	n in Cultured Cells," Methods En	zymol.	_
			et al ., "Membrane Glycopr licine," <i>Blood</i> 80:1105-111	otein CD36: A Review of Its Roles in / 5 (1992).	Adherence, Signal Transduction,	and	+
		GREGORIADIS	, G., Chapter 14. "Lipesor	nes", <u>Drug Carriers in Biology and M</u> e	odicine -pp. 287-341-(Academic-Pr	ess, 1979)	-
				g-Oligonucleotide-Intercalator-Conjuga Receptor α-Regulatory Sequence," J.			+
		HABERLAND, e Immunol. 142:85		Albumin Receptor in Activation of Muri	ne Peritoneal Macrophages In Vit	то," <i>J</i> .	
		HABERLAND, e Differentiation In	t al., "Two Distinct Receptor Vitro," J. Clin. Inves. 77:6	ors-Account for Recognition of Maleyl 81-689 (1986).	Albumin in Human Monocytes du	ıring ——	
		HART, et-al., "A-	Drosophila-Gene-Encoding	g-an-Epithelial-Membrane Protein with	Homology to CD36/LIMP II," J. I	Viol. Biol.	1

	2		
Examiner's Signature		Date Considered	

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

1

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁶ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁹ Applicant to place a check mark here if English language

;	Substit	ute for form 1449)A/PTO	C	omplete if Known	TEC	
OIP	_ST	ATEMENT	ON DISCLOSURE BY APPLICANT sheets as necessary)		08/765,108	H CENTE	APR 1
	,	City and many a	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Filing Date	March 27, 1997	-20	6
		· *		First Named Inventor	Monty Krieger	<u></u>	2
APR 1	1 2002	اين ٠		Group Art Unit	1646	8	9
•		<i>\vec{\vec{\vec{v}}}</i>		Examiner Name	Ulm, John D.	52	o
pet	6	of	13	Attorney Docket Number	MIT 6620 CIP	8	
× 20 4	DEMA	<u>, </u>	10	Pattorney Booker Hamber	0020 0		
THA			OTHER ART	NON PATENT LITERATURE DOCUM	MENTS		
	1 Cito	1		r (in CAPITAL LETTERS), title of the article			I T ²
xaminer's Initials*	Cite No.1			r (in CAPITAL LETTERS), tue of the article at, serial, symposium, catalog, etc.), date, pa publisher, city and/or country where publish	age(s), volume-issue number(s),		'
		HERZ, et al., "S	Surface location and high a	ffinity for calcium of a 500-kd liver mer		o the LDL-	
	. .	receptor sugges	t a physiological role as lip	oprotein-receptor," EMBO J. 7:4119-4	127 (1988).		ļ
	<u> </u>	HOLT of al. "A	n-Oligamar Camplamentar	y-to-c-myc mRNA Inhibits Proliferation	of HI -60 Promyelogytic Cells :	and Induces	_
			Mol. Cell. Biol. 8:963-973 (- 016-00-1-10111y0106y116-601 15-6	##W-###W##############################	<u> </u>
		Differentiation,	IVIOI. Cell. DIOI. 0.303-313 ((1900).	•		
		HODINGHLALA	L-TCan magaz Eurotian of	Sinusoidal Liver Cells: Acetylated Low	-density i honrotein is Endocy	osed via a	
				Serum Albumin," J. Biol. Chem. 259:5		looca via a	
				(CD36) is physically associated with ad. Sci. USA 88(17):7844-7848 (1991)		yrosine	
		HUNT, et al., "C (1990).	nacterization and sequence	e of a mouse hsp70 gene and its expr	ession-in-mouse cell-lines," Ge	n o 87:199 /	204
				ating Factor Regulates Both Activities of facrophages," <i>J. Clin. Invest.</i> 92(2):750		/ Ester	-
		ITAKURA, et al.	, "Synthesis and use of sy	nthetic-oligonucleotides," Ann. Rov. Bio	ochem. 53;323-356 (4984).		
		KABAT-etal-S MD, 1987).	Sequences of Proteins of L	mmunological-Interest, 4th-Ed(U.SD	ept. Health-and-Human-Service	es, Betheso	la,
					Density Linearetein Density	Francis -	
		and for Multiple	ai., DNA-Mediated Transf Golgi Processing Pathway	er of a Human Gene Required for Low rs," <i>Mol. Cell. Biol</i> . 6:2734-2737 (1986)	- сеняну- строрготет несертог .).	cxpressio n	
	 	KINGSLEY, et a	al., "Receptor-mediated er	decytesis-of-lew-density-lipoprotein:-Se	omatic-cell-mutants-define-mult	iple-genes-	
		required for expi	ress of surface-receptor ac	ctivity," <i>Proc. Natl. Acad. Sci. USA</i> 81:5	5454-5458 (1984).		
	'	<u> </u>					l
aminer's	1	()	- J	Date Consid	io col		

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

ease type a plus sign (+) inside this box →	+		

_
т

		L.				Trademark Office: U.S. DEF	ARIMENI	OF COMM	MERCE
		Reduction Act of 1995, no pout rute for form 1449A/P		o a collection of information unless it o	Complete				
	INI	EODMATION	DISCLOSURE	Application Number		08/765,108			
0			Y APPLICANT				TECH		ב
APR	1 1	~ \	,,	Filing Date		March 27, 1997	\overline{c}	2	7
3	<u>'</u> ' Z0	102 -		First Named Inventor		Monty Krieger	Z	Ř	$\overline{}$
13		,\$		Group Art Unit		1646	盂	\vdash	П
14V		<u>~~~~</u>		Examiner Name		Ulm, John D.	- 133	6	<u>:-</u>
Sheet	PEMAS	of	13	Attorney Docket Number		MIT 6620 CIP	<u> </u>		_<
			OTHER ART	NON PATENT LITERATURE	DOCUMENTS		600/	002	П
Examiner's	Cite	T		(in CAPITAL LETTERS), title of		propriate), title of the	/2900		
Initials*	No.1	ite	em (book, magazine, journal	, serial, symposium, catalog, etc publisher, city and/or country wh	.), date, page(s), vol ere published	ume-issue number(s),			
9-		KOBZIK, "Lung Mad	crophage Uptake of Unc	psonized Environmental Pa	rticles," J. of Immu	inol. 155(1):367-376	(1995).	1,	
		KODAMA, et al., "T 535 (1990).	Type I macrophage scav	en ger-receptor contains α-h	e lical and collage r	n-like coiled coils," Na	ture 343	:531-	
		Receptor-Defective	Hamster Cell Mutants,"	the LDL Pathway of Recept Cell 33:413-422 (1983).					
2		KRIEGER, "Molect 17:141-146 (1992).		sclerosis: structure of the m	acrophage scaven	ger receptor," Trends	Biochei	n. Sci.	
2		KRIEGER, "Molecu	lar Flypaper, Host Defer	nse, and Atherosclerosis," J.	Biol. Chem. 268(7	7):4569-4572 (1993).			
-		KRIEGER, "Recon	stitution of the Hydropho	obio Gore of Low-Density Lip	o protein," <i>Meth.</i> E	nzymol: 128:608-613	(1986).		
		KRIEGER, et al., "/	Amphotericin B-selection	of-mutant-Ghinese-hamstei	cells with defects	in-the receptor-medi	ated		
				holesterol biosynthesis," Pro					
_			solation of Chinese Han Biol. 150:167-184 (198	nster C el l Mutants Defective 1).	in the Receptor-n	nediated-Endocytosis	of Low E	ensity	
		KRIEGER, et al., "f	Reconstituted Low-Dens	it y Lipop retein," <i>J. Supra.</i> -Si	ruct. 10:467-478 (1979).			
				-of Multiligand Lipoprotein-R Rev. <i>Biochem</i> . 63:601-637 (hage Scavenger Rec	eptors ar	id LDL	
			·						
Examiner's Signature			D	D	ate Considered				

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

سلاھ	_
1	
	-
•	

Please type a plus sign (+) inside this box →	+	l
	L.,	

perwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number Substitute for form 1449A/PTO Complete if Known Application Number 08/765,108 INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary) March 27, 1997 Filing Date First Named Inventor Monty Krieger m 1646 Group Art Unit **Examiner Name** Ulm, John D. Attorney Docket Number MIT 6620 CIP of 13 RADEMAY OTHER ART - NON PATENT LITERATURE DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the Examiner's Cite No. Initials* item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published KRIEGER, et al., Cold Spring Harbor Symposia on Quantitative Biology Vol. L-VII, 605-609 (1992): LEWIS, et al., "Automated site-directed drug design: the concept of spacer-skeletons for primary structure generation," Proc. R. Soc. Lond. 236, 125-140 and 141-162 (1989). :OWRY, et al. "Protein Measurement with the Folin Phenol Reagent," J. Biol. Chem. 193:265-275 (1951): LUOMA, et al., "Expression of α2-Macroglobuli Receptor/Low Density Lipoprotein Receptor-related Protein and Scavenger Receptor in Human Atherosclerotic Lesions," J. Clin. Inv. 93(5):2014-2021 (1994). MAHER, et al., "Inhibition of DNA Binding Proteins by Oligonucleotide-Directed Triple Helix Formation," Science 245:725-730 (1989). MATSUMOTO, et al., "Human-macrophage-scavenger-receptors:-Primary-structure-expression, and localization in atherosclerotic lesions," Proc. Natl. Acad. Sci. USA 87:9133-9137 (1990). McKINALY, et al., "Rational design of antiviral agents," Annu. Rev. Pharmacol. Toxicial. 29:111-122 (1989). MERRIFIELD, "Solid Phase Peptide Synthesis I, The Synthesis of a Tetrapeptide," J. Am. Chem. Soc. 85:2149-2154 (1964). MOESTRUP, et al., Distribution of the az-macroglobulin receptor/low-density-lipoprotein-receptor-related-protein-in-human tissues," Cell Tissue Res. 269:375-382 (1992). MULLIGAN, "The Basic Science of Gene-Therapy," Science 260:926-932-(4993).

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Date Considered

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

+

Examiner's

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached

		D. J. 1811 - A.A. 164005			No ation of the continue to the continue of	Patent and Trademark Office: U.S. DEI	PARTMENT	OF COM	MERC
		Reduction Act of 1995, r bute for form 1449,			o a collection of information unless it contains a	Complete if Known			
			BY	ISCLOSURE APPLICANT	Application Number	08/765,108	TECH CENT	APR	i
PATENT	ן איניי	, 6		, ,	Filing Date	March 27, 1997	Ш	1-1	Ť
图	•	2000 8			First Named Inventor	Monty Krieger		6	-
(P)					Group Art Unit	1646	စ္ဆ	20	_<
\\dagger	40e.	- A 34			Examiner Name	Ulm, John D.	8	00	$\overline{\Gamma}$
heet	POEM!	of of		13	Attorney Docket Number	MIT 6620 CIP	29	- 70	
							ğ		J
	T				NON PATENT LITERATURE DOCU				
Examiner's Initials*	Cite No.1		item (book, magazine, joumal	(in CAPITAL LETTERS), title of the article I, serial, symposium, catalog, etc.), date, p publisher, city and/or country where publis	page(s), volume-issue number(s), shed			Τ²
-					Uptake and Degradation of Acetylat s," <i>J. Biol. Chem.</i> 258:12221-12227		Rat-Liver		
				Distribution Intracelluthol. 139:1411-1423 (ılar Localization, and In Vitro Expres (1991).	sion-of-Bovine-Macrophage-So	avenger		
		NARANG, et al. 65:610-620 (198		hemical-Synthesis-of	-Deexyeligenucleetides-by-the-Modif	ied-Triester-Method ," <i>Method</i>s	Enzymol		
					ytes-and-Platelets-by-Monoclenal-Antro," J. Clin. Invest. 84:468-475 (198		ythocytes		
					n-of-duck-hepatitis-B-virus-replication EMBO J. 12:1257-1262 (1993).	-and-gene-expression-by-phos	phorothio	ate-	
<u></u>		OQUENDO, et a 101 (1989).	al., "Cl	DS6 Directly Mediates	s Cytoadherence of Plasmodium falo	ciparium Parasitized Erythoci te	s ," <u>Cell</u> 5 l	3 :95- -	
				nucleotide inhibition coids Res. 19:3435-34	of IL2Ra mRNA transcriptionby prom 41 (1991).	oter-region-collinear-triplex-fon	mation-in-		
				rentiation-of-binding- J. 281:745-751 (1992	sites-on-reconstituted-hepa tic-scaver).	nger-receptors-using-oxidized-k	ow dons it	y	
		PEARSON, et a melanogaster," F	I ., "Ex Proc. N	pression-doning-of-d Natl. Acad. Sci. USA	SR-Cl, a-class-C-macrophage-specil 92:4056-4060 (1995).	io-scavenger-receptor-from-Dro	osphila -		
		Trimeric Proteins	with (Collagenous Triple H	ovine-Scavenger-Receptors-Expresso elical Domains Comprising Noncova :23985-23993 (1991).				
aminer's	-		n		Date Consi				_

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

. . .

	 <u> </u>		-
Examiner's Signature	//)	Date Considered	
AP-1/41-01-15	 		· · · · · · · · · · · · · · · · · · ·

Spring Harbor Laboratory Press (1989) (Table of Contents only).

SAMBROOK, Fritsch, and Maniatis. Molecular Cloning: A Laboratory Manual, Second Edition, Cold Spring Harbor, NY, Cold

^{*}EXAMINER: Initial if refelence considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Please type a plus sign (+) inside this box →	+	

Under the Paperwork Reduction Act of 1995, no persons are required to respond to	a collection of information unless it contains a valid	d OMB control number		
Substitute for form 1449A/PTO	Complete if Known			
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)	Application Number	08/765,108		
*	Filing Date	March 27, 1997	_	
(APR 1 1 2002 33)	First Named Inventor	Monty Krieger		
	Group Art Unit	1646	_	
	Examiner Name	Ulm, John D.		
Sheet of 13	Attorney Docket Number	MIT 6620 CIP	_	

xaminer's	Cite	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the	T ²
Initials*	No.1	item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s),	
		publisher, city and/or country where published	
		SARIN-et al "Inhibition of acquired immunodeficiency-syndrome-virus-by-oligodeoxynucleoside-methylphosphonates," Proc.	
		Natl. Acad. Sci. USA 85:7448-7451 (1989).	l
1		Mail: Adds. Gdl. Gdl. 330 (1909).	
		SAVILL, et al., "Macrophage Vitronectin Receptor CD36 and Thrombospondin Cooperate in Recognition of Neutrophlis	1
		Undergoing Programmed Cell Death," Chest 99:6S-7S (suppl) (1991).	l
		Ordergoning Programmed Cell Deaut, Oriest 95:00-70 (Supply) (1991).	1
		SCHAUB, et al., "Recombinant Human Macrophage Colony-Stimulating Factor Reduces Plasma Cholesterol and	1
		Carrageenee Granuloma Foam Cell Formation in Watanabe Heritable Hyperlipidemic Rabbits," Arterioscler. Thromb.	
		14(1):70-76 (1994).	
		SCHNITZER, et al., "Preferential Interaction of Albumin-binding Proteins, gp30 and gp18, with Conformationally Medified—	<u> </u>
		Albumins," J. Biol. Chem. 267:24544-24553 (1992).	<u> </u>
		Additions, J. Biol. Crieff. 201.24344-24333 (1992).	
			1
-		SCRIVER, et al., Eds., in The Metabolic and Molecular Bases of Inherited Disease, Vol. 11, 7th Ed., pp. 2033; 2060 2061,	
		New York, McGraw Hill.	>
			<u> </u>
		SEGE, et al., "Characterization of a Family of Gamma-Ray-Induced CHO Mutants Demonstrates that the IdIA Locus is Diploid	¥
ŀ		and Encodes the Low-Density Lipoprotein Receptor," Mol. Cell. Biol. 6:3268-3277 (1986).	† <i>[</i>
		R	-
		-SEGE _r et al., "Expression and regulation of human-low-density-lipoprotein receptors in Chinese hamster ovary cells "Mature"	— e
		307:742-745 (1984). §:	1 2
		0// 02	3 [
		SHAW, et al., "Modified deoxyoligonucleotides stable to exonuclease degradation in serum," Nucleic Acids Res. 19(147-750	
		(1991).	
		-SPARROW, et al., "A-Macrophage-Receptor-That-Recognizes Oxidized Low-Density-Lipoprotein-but-Not-Acetylated-Low-	
		Density Lipoprotein," J. Biol. Chem. 264:2599-2604 (1989).	
		STANTON, et al., "A Macrophage Fe Receptor for 1gG Is-Also a Receptor for Oxidized Low-Density Lipoprotein," J. Biol.	=
		Chem. 267:22446-22451 (1992).	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Pate Considered

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Examiner's

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Please type a	plus sigi	n (+) inside this box -	,			PTO/SI Approved for use through 10/31/99. ON Patent and Trademark Office: U.S. DEPARTMENT OF	B/08A (10-9 IB 0651-003 COMMERCI
Inder the Pap	erwork i	Reduction Act of 1999	5, no persor	s are required to respond t	o a collection of information unless it contains	a valid OMB control number	
,	Substi	tute for form 144	19A/PTO			Complete if Known	
		_		SCLOSURE APPLICANT	Application Number	08/765,108	
6	P	Cose as many	sheets a	s necessary)	Filling Date	March 27 4007	
/ ~		6)			Filing Date	March 27, 1997	_
1		2/			First Named Inventor	Monty Krieger	
APR	11	2002 😅			Group Art Unit	1646	
1 """		ဋ			Examiner Name	Ulm, John D.	
Heet	1	2 👸 of		13	Attorney Docket Number	MIT 6620 CIP	
(W)		et .					
<u> </u>	TRAD	MC		•	NON PATENT LITERATURE DOC		
xaminer's Initials*	Cite No.1			ook, magazine, journal	(in CAPITAL LETTERS), title of the arti I, serial, symposium, catalog, etc.), date publisher, city and/or country where put	e, page(s), volume-issue number(s),	T²
		N. Engl. J. Med		5-924 (1989). olecular-Genetics, p	p . 2 13-219 (1971).		-
مه				otein genes in <i>Droso</i> evelopment 108(2):2		relopmental control of transcription and specification	ic
	-	SZOSTAK, "II	1-Vitro-G	enetics;"-TIBS-19:89	-9 3 (1992).		
					,	CEN	APR
		Chem. 264:75	76-7583	(1989).	, , ,	otor for Platelet-Gollagen-Adhesion," J. Bioli	
		VANDEPOL, 6 Therap. 2:231-	t-al ., "Cli -239 (199	nical-Applications of 11).	Recombinant-Macrophage-Colony	y-Stimulating-Factor-(rhM-CSF),*-Biotec	2002
					ression-of-a-cDNA-Encoding-Rat-Lotein CD36," J. Biol. Chem. 266:16	IMP-II-a-Novel-74-kDa-Lysesemal-Merassand 5818-16824 (1991).	
					dent-regulation of the AG-LDL-Rec A371, #2135 (1992).	eeptor-in-normal-and-transformed-bovine-aort	ic
		VILLASCHI, et Microvasc. Re			Native-and-Glycosylated-Albumin-	Gold Complexes in Perfused Rat Lungs,"	
	_	MICKSTROM	ot-ol-"L	luman promyolomatic	Houkemia HL 60 cell proliferation	and a muc protein expression are inhibited by	,

an antisense pentadecadeoxynucleotide targeted against c-myc mRNA," Proc. Natl. Acad. Sci. USA 85:1028-1032 (1988).

Date Considered

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

+

Examiner's Signature

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Please type a plus sign (+) inside this box →	+

Substitute for form 1449A/PTO	Complete if Known		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT Use as many sheets as necessary)	Application Number	08/765,108	
3/	Filing Date	March 27, 1997	
APR 1 1 2002 \$	First Named Inventor	Monty Krieger	
- 44	Group Art Unit	1646	
·	Examiner Name	Ulm, John D.	
of 13	Attorney Docket Number	MIT 6620 CIP	

		OTHER ART - NON PATENT LITERATURE DOCUMENTS	
Examiner's	Cite	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the	T²
Initials*	No.1	item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s),	
		publisher, city and/or country where published	
		YOUNG, et al., "Triple helix formation inhibits transcription elongation in vitro," Proc. Natl. Acad. Sci. USA 88:10023-10026—(1991).	
<i></i>		ZAMECNIK, et al., "Inhibition of replication and expression of human T-cell-lymphotropic-virus type III-in cultured cells by exogenous systhenic oligonucleotides complementary to viral RNA," Proc. Natl. Acad. Sci. 83:4143-4146 (1986).	/2
		ZAMECNIK, et al., "Inhibition of Rous sarcoma virus replication and cell transformation by a specific oligodeoxynucleotide," Proc. Natl. Acad. Sci. USA 75:280-284 (1978).	
		ZHU, et al., "Systemic-Gene Expression-AFter-Intravenous-DNA-Delivery into Adult-Mice," Science 261:209-211-(1993).	
		EC Z	
		APR 1 6 CENTER	
		ER 160	
		1600/290	

*EXAMINER: Initial if deference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

+

Examiner's

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.